In 2002, the Medical Assistance Administration (MAA) of the Washington State Department of Social and Health Services contracted with the Oregon Medical Professional Review Organization (OMPRO) to assist in conducting the Consumer Assessment of Health Plans (CAHPS) survey across various programs. OMPRO contracted with Health Services Advisory Group (HSAG) to conduct the survey administration, data analysis and reporting for the CAHPS survey.

MAA's primary goal of the Medicaid CAHPS project is to provide timely and comparative information to clients to assist them in choosing a health plan. This information was collected through mail and telephone surveys that assessed clients' experiences with the health care system and the services they received through Healthy Options, Kaiser Foundation Health Plan, and CHIP. MAA's second goal is to provide performance feedback that will be used to improve Medicaid clients' outcomes and satisfaction. CAHPS results are being provided to health plans with the expectation that they will be integrated into comprehensive quality improvement initiatives at the health plan, provider group, and individual provider levels of the health care delivery system.

This year's CAHPS survey results are included in the 2003 Medicaid client enrollment materials. Prospective members received summary results in their enrollment materials to assist them in choosing their health plan, while health plans and other organizations received feedback regarding members' experiences through the annual CAHPS stakeholder report, "2002 Washington State Medicaid Client Satisfaction Survey Results."

## Study Populations

For the 2002 CAHPS study, four Medicaid populations were targeted:

### Healthy Options General Child Population

Children aged 12 years old and younger who were continuously enrolled in Medicaid from July 1, 2001 through December 31, 2001 in a Healthy Options plan and had English as their primary language were randomly selected from Medicaid enrollment data. Up to a one-month break in enrollment period was allowed. This sample excludes children assigned a prescreen status code of having a chronic condition, in accordance with the methodology recommended by the National Committee for Quality Assurance (NCQA). The chronic condition prescreen status code was based on claims and encounter data, as specified in Volume 3 of the NCQA Health Plan Employer Data and Information Set (HEDIS®).[1]

[1] National Committee for Quality Assurance. *HEDIS® 2002, Volume 3: Specifications for Survey Measures.* Washington, DC: NCQA Publication, 2001.

The six Healthy Options plans that had members in this population are: Community Health Plan of Washington (CHPW), Columbia United Providers (CUP), Group Health Cooperative (GHC), Molina Healthcare of Washington (MHW), Premera Blue Cross (PBC), and Regence Blue Shield (RBS).

### Healthy Options Children with Chronic Conditions Population

Children aged 12 years old and younger who were continuously enrolled in Medicaid from July 1, 2001 through December 31, 2001 in a Healthy Options plan and had English as their primary language were selected from Medicaid enrollment data. Up to a one-month break in enrollment period was allowed. Children were identified as having a chronic condition based on responses to the survey questions. This sample includes randomly selected children as well as children assigned a prescreen status code of having a chronic condition, in accordance with the methodology recommended by NCQA.

The six Healthy Options plans that had members in this population are: Community Health Plan of Washington (CHPW), Columbia United Providers (CUP), Group Health Cooperative (GHC), Molina Healthcare of Washington (MHW), Premera Blue Cross (PBC), and Regence Blue Shield (RBS).

### Kaiser Foundation Health Plan Child Population

Children aged 12 years old and younger who were continuously enrolled in Medicaid from July 1, 2001 through December 31, 2001 in Kaiser Foundation Health Plan and had English as their primary language were randomly selected from Medicaid enrollment data.

### Children's Health Insurance Program (CHIP)

Children aged 12 years old and younger who were continuously enrolled in CHIP from July 1, 2001 through December 31, 2001 and had English as their primary language were randomly selected for inclusion in the CAHPS Child survey.

## Sampling Methodology

### Healthy Options

For each of the six participating plans in Healthy Options, 1,275 children meeting the Medicaid eligibility criteria were randomly selected for the CAHPS Child survey. This group of 1,275 randomly selected children per plan represents the Healthy Options general child population (Sample A). Additionally, up to 1,650 children with a chronic condition prescreen status code (based on claims and encounter data) were also selected for the CAHPS Child survey (Sample B), yielding a total survey sample size of up to 2,925 members per health plan. Please note, not all plans were able to identify 1,650 children with chronic conditions; therefore, Sample B for these plans was less than 1,650.

### Kaiser Foundation Health Plan

For Kaiser Foundation Health Plan, 739 children meeting the Medicaid eligibility criteria were randomly selected for the CAHPS Child survey. The Kaiser Foundation Health Plan serves Medicaid eligible children only through a contract with the Basic Health Plan. Kaiser does not contract with Healthy Options directly.

### Children's Health Insurance Program (CHIP)

CHIP was initiated in the State of Washington on February 17, 2000. Since CHIP is a relatively new program, the population size for CHIP was limited. A statewide random sample of 738 non-duplicated Washington resident child enrollees was selected from enrollment data.

**TABLE 1: SAMPLE SIZE BY POPULATION**

| Study Population | Total Sample Size |
|---|---|
| Columbia United Providers | 1,946 |
| Community Health Plan of Washington | 2,925 |
| Group Health Cooperative | 2,721 |
| Monlina Healthcare of Washington | 2,925 |
| Premera Blue Cross | 2,541 |
| Regence Blue Shield | 1,788 |
| Kaiser Foundation Health Plan | 739 |
| Children's Insurance Health Plan (CHIP) | 738 |

## Survey Process

Surveys were administered to the selected enrollees from eight plans: the six health plans participating in Healthy Options, Kaiser Foundation Health Plan, and CHIP. On April 29, 2002, 14,846 Healthy Options enrollees, 739 Kaiser Foundation Health Plan enrollees, and 738 CHIP enrollees, for a total of 16,323, were mailed cover letters and survey questionnaires. If a survey was not returned within one week, reminder postcards were mailed. A second survey was then mailed to non-respondents within 30 days of the first survey mailing. If questionnaires were still not returned, a second postcard reminder was sent out one week after the second survey mailing. Non-respondents received follow-up telephone calls (Computer Assisted Telephone Interviews) for five weeks with up to six calls attempted per client. The entire survey administration process closed on July 15, 2002. The following table presents actual tasks and dates of the survey process.

TABLE 2: SURVEY ADMINISTRATION DATES

| Survey Administration | Dates |
|---|---|
| Mail first questionnaire and cover letter to members | April 29, 2002 |
| Mail postcard reminder to non-respondents | May 6, 2002 |
| Mail second questionnaire and cover letter to non-respondents | June 4, 2002 |
| Mail second postcard reminder to non-respondents | June 11, 2002 |
| Computer Assisted Telephone Interviewing (CATI)<br>Phone follow-up conducted with non-respondents to mailed survey (6 attempted phone calls) | June 25, 2002 –<br>July 15, 2002 |

## Survey Instrument

The CAHPS survey tools were developed under cooperative agreements among Harvard Medical School, the RAND Institute, the Research Triangle Institute, and the Agency for Healthcare Research and Quality. A version of CAHPS has been implemented in Washington State by MAA for six years. In the CAHPS Child survey, respondents provide information about their children's experiences with various aspects of medical care, including:

- Getting Needed Care
- Getting Care Quickly
- How Well Doctors Communicate
- Courteous and Helpful Office Staff
- Customer Service
- Overall Satisfaction Ratings

Additionally, children with chronic conditions (as determined by responses to the survey questions) were evaluated on six additional composites which comprise the Children with Chronic Conditions measurement set:

- Access to Prescription Medicines
- Access to Specialized Services
- Family Centered Care: Getting Needed Information
- Family Centered Care: Personal Doctor or Nurse Who Knows Child
- Family Centered Care: Shared Decision Making
- Coordination of Care

Questions related to children with chronic conditions were added in year 2002. In particular, questions were designed to learn about this group's experiences with patient and provider decision-making and choices. For the CHIP population, the survey was slightly modified to obtain questions relevant to that population. All survey instruments included the core CAHPS 2.0H questions plus supplemental questions of special interest

to MAA. Survey administration, data collection, and data analysis followed the NCQA and HEDIS® protocols.

There are four general types of survey questions:

1) Questions that asked respondents to rate aspects of their child's care from 0 to 10, where 0 = Worst Possible and 10 = Best Possible.
2) Questions that asked respondents to report how often something happened, by choosing "Never," "Sometimes," "Usually," or "Always."
3) Questions that asked if certain things were "A Big Problem," "A Small Problem," or "Not A Problem."
4) Questions that asked respondents if anyone helped with the problem, by choosing "Yes" or "No."

**TABLE 3: TYPES OF RESPONSES TO QUESTIONS**

| Response Type 1 | Response Type 2 | Response Type 3 | Response Type 4 |
|---|---|---|---|
| 0-6 | Never/Sometimes | Big Problem | Yes |
| 7-8 | Usually | Small Problem | No |
| 9-10 | Always | Not a Problem | -- |

The survey instrument was available in English for clients enrolled in Healthy Options and CHIP. The protocol that was utilized in 2002 was the mixed mode methodology. Mixed mode methodology consists of a two-wave mailing with a reminder postcard and a minimum of three telephone follow-ups. In 2002, MAA elected to increase the number of telephone calls from three to six. It was also decided that in 2002 a Spanish option would be part of the initial cover letter that went to the plan members. This consisted of a prominent text box on the cover letter stated in Spanish that if the member wanted to complete the questionnaire over the phone in Spanish, the member should call the 1-800 number. If a plan member called this number they were automatically triaged into the Spanish CATI.

**Response Rates**

The overall response rate for the state of Washington was 46.0%. The overall response rate for the Healthy Options population was 45.6%. The overall response rate for the Kaiser Foundation Health Plan was 55.6%, and the overall response rate for CHIP was 44.3%. The actual number of responses varied per question. Complete surveys were those for which respondents answered critical questions and completed at least 80% of the core CAHPS questions. In 2002 the formula for calculating the response rate changed by NCQA. The bad address/bad phone disposition is now considered a non-response disposition and is no longer excluded from the denominator. Due to the fact that the bad address/bad phone disposition is part of the denominator, response rates may appear

lower than in previous years. Caution should be exercised when comparing 2002 response rates to response rates from prior years.

**Disposition**

The table below shows the final sample dispositions or outcomes for each population surveyed and their respective response rates. In order to fairly depict response activity, response rates were adjusted by removing those individuals who were not eligible to be surveyed (e.g. deceased, language barrier) from the total number surveyed. Of the 16,323 total sampled, 849 enrollees across all populations were found to be ineligible. Ineligible is a disposition term defined by HEDIS® and includes those members who are deceased, had language barriers, self-reported ineligible member age, or were not currently enrolled in the health plan. Ineligible respondents were determined through both the mail and telephone surveys. There were a total of 8,355 non-respondents to the survey. A non-respondent is described as having a bad address or phone number, a break-off (survey less than 80% complete) or a refusal. There were a total of 7,119 completed surveys, 5,413 by mail and 1,706 by telephone.

**TABLE 4: SURVEY DISPOSITION BY POPULATION**

| CAHPS | CUP | CHPW | GHC | MHW | PBC | RBC | Kaiser | CHIP |
|---|---|---|---|---|---|---|---|---|
| **Original Sample** | 1,946 | 2,925 | 2,721 | 2,925 | 2,541 | 1,788 | 739 | 738 |
| **Ineligible** | 101 | 156 | 107 | 156 | 153 | 107 | 18 | 51 |
| **Non-respondents** | 1,094 | 1,401 | 1,560 | 1,600 | 1,196 | 801 | 320 | 383 |
| **Completed Surveys** | 751 | 1368 | 1,054 | 1,169 | 1,192 | 880 | 401 | 304 |
| **Mail Complete** | 566 | 988 | 785 | 849 | 907 | 739 | 348 | 231 |
| **Telephone Complete** | 185 | 380 | 269 | 320 | 285 | 141 | 53 | 73 |
| **Response Rate** | 40.7% | 49.4% | 40.3% | 42.2% | 49.9% | 52.3% | 55.6% | 44.2% |

# Data Analysis

## Determining Children with Chronic Condition Status

For the Healthy Options population (excluding Kaiser Foundation Health Plan and CHIP), 2,250 children were identified as having a chronic condition (as determined by responses to the survey questions). It is important to note that the 2,250 children identified as having a chronic condition are not mutually exclusive and included children from both Sample A (711 children) and Sample B (1,539 children). The sample prescreening status code used to identify Sample B is not the determining factor for defining a child with a chronic condition. Instead, the 2002 CAHPS 2.0H Child survey contains a Children with Chronic Conditions (CCC) survey-based screening tool, and responses to those specific questions determined who was assigned to the CCC group. In addition, if a child was randomly selected in Sample A (the general Healthy Options population) and was also identified as having a chronic condition based on responses to the CCC survey-based screening tool, then the child's responses are included for the general Healthy Options population and the CCC population.

All CAHPS 2002 results were compiled using SAS version 8. The CAHPS SAS analyses were based on recommendations from the CAHPS 2.0 Survey and Reporting Kit. These recommendations were used in cleaning data, computing all health plan scores, comparison statistics, and case-mix adjustment. Results are presented for core CAHPS questions and composite-level results.

## Response Scales

The CAHPS survey core questions consist of three major response scales: how much of a problem the member had with a particular situation; how often a particular health care event occurred; and their rating of personal doctors, specialists, health care, and health plans. The "how much of a problem" scale consisted of three possible responses, while the "how often" and "global rating of care" scales had more than three possible response types. For consistency in reporting and emphasis on positive plan performance, the "how often" and "global rating of care" scales were regrouped and recoded into three responses according to the CAHPS 2.0 Survey and Reporting Kit.

According to the CAHPS Survey and Reporting Kit, combining "never" and "sometimes" results in virtually no loss of information. Results from repeated CAHPS demonstration project surveys indicate that the "never" response option is seldom selected by respondents. Typically less than 5% of the respondents select the "never" response to questions such as, "How often did doctors or other health providers listen carefully to you?" However, combining the "always" and the "usually" responses would result in significant loss of information. In CAHPS demonstration projects, about 50% of respondents stated that their health care providers "always" listen, explain, and respect their comments. Another 20% stated that their providers "usually" listen, explain, and respect their comments. Combining these categories would reduce the ability to discriminate performance on these items in the CAHPS survey. In other words, important

information that consumers can use to examine health plan performance is contained in the top two responses ("always" and "usually") to the *never/sometimes/usually/always* questions. Note, in the "Getting Care Quickly" composite, one question is framed in the negative and is therefore grouped differently. For example, a response of "never" to the question "How often did your child wait in the doctor's office more than 15 minutes past your appointment time?" is a positive response rather than a negative response. For the composite scoring and analysis for questions like this, responses were reversed to be compatible with the scoring for other questions (e.g., the "never" response becomes "always", etc.).

**Calculating Results**

For each survey question per health plan, the following process occurs: a mean numerical response is calculated and raw percentage scores are reported; the resulting mean is then statistically adjusted; and finally, the adjusted means are used to determine star ratings. First, a numeric value is assigned to each response type as shown in Table 5.

**TABLE 5: RECODING RESPONSE TYPES**

| Response Type | Resulting Recoded Variable |
|---|---|
| Big problem, Small problem, Not a problem | 1, 2, 3 respectively |
| Never, Sometimes, Usually, Always | 1, 1, 2, 3 respectively |
| 0-6, 7-8, 9-10 | 1, 2, 3 respectively |

Second, a mean numerical response is calculated for each question per health plan (from 1.0 to 3.0), and the percent of respondents scoring 1, 2, or 3 are reported. Finally, the means scores are adjusted and the statistical significance is evaluated to determine star ratings.

**Case-Mix Adjustment**

Case-mix refers to the characteristics of respondents used in adjusting the results for comparability among health plans. In general, the demographics of a response group influence CAHPS results. In order to allow for valid plan-to-plan comparisons, case-mix adjustment was performed to control for differences in child health status, respondent age, and respondent education. The case-mix adjustment was performed using standard linear regression modeling techniques.

This procedure was performed independently on the Healthy Options general child population (Sample A), and also on the Healthy Options children with chronic conditions population. Results in the child Healthy Options studies (general child population and children with chronic conditions population) were case-mix adjusted for general health

status of the child, and educational level and age of the respondent. Given that differences in case-mix can result in differences in ratings between plans that are not due to differences in quality, the data were adjusted in order to allow plans to be similar for these characteristics. If data are missing for any of the adjuster variables, then a plan mean is imputed; that is, the plan mean is used for an adjuster variable missing a response. Typically, the overall size of the adjustment from all adjuster variables and the number of missing adjuster variables are both small. The adjusted plan mean is then compared to the overall mean (average response among all plans) in order to determine the star rating. The star ratings indicate whether a plan's adjusted mean response is statistically different from the overall mean response. Three stars indicate a plan mean that is statistically higher than the overall plan mean; two stars indicate a plan mean that is not statistically different than the overall plan mean; and one star indicates a plan mean statistically lower than the overall plan mean. A plan may have similar raw percentages but different star ratings because 1) the star ratings are adjusted (but the percentages are not) for characteristics found in the literature to influence results, and 2) the number of responses per plan may vary and contribute different weights to the overall plan average.

**Statistical Significance**

Tests of statistical significance were performed only on the Healthy Options general population and the Healthy Options Children with Chronic Conditions population. First, a global *F* test was performed to determine if any of the adjusted plan means differed significantly from the adjusted Healthy Options state mean. If the global *F* test revealed that plans did differ significantly, independent *t* tests were performed to determine if each plan's adjusted mean differed significantly from the overall adjusted state mean. An alpha-level of 0.05 was used to determine statistical significance (i.e., $p < 0.05$). Please note, plans with fewer than 85 responses for a single survey item were not included in the statistical tests in accordance with previous CAHPS analyses presented by MAA .

**Ratings**

Stars were assigned to each health plan's case-mix adjusted mean to indicate whether the plan's performance was significantly better or worse than the overall mean of participating plans in the state. Plans with means that are statistically better than the state average are noted with three stars. Plans with means that are statistically worse than the state average are noted with one star. Plans with means not statistically different from the overall state average are noted with two stars. For the CHIP and the Kaiser Foundation Health Plan, only unadjusted percentages are presented. Stars are not displayed because there is no comparison group for these programs. Since comparisons are not made for these programs, no adjustments are necessary.

## Limitations and Cautions

The findings are subject to some limitations in the survey design, analysis, and interpretation. These limitations should be considered carefully when interpreting or generalizing the findings presented. These limitations include:

### Case-mix Adjustment

While data have been adjusted for differences in self-reported general health status and respondent's age and education, it was not possible to adjust for differences in enrollee characteristics that were not measured. These characteristics include income, employment, or other characteristics that may not be under the plan's control for delivery of health services.

### Non-Response Bias

The experiences of the survey respondent population may be different than that of non-respondents with respect to their health care services and may vary by plan. These aspects should be considered when interpreting the results.

### Single Point in Time

The results of this survey provide a snapshot comparison of health plans at a single point in time. These comparisons may not reflect stable patterns of consumer ratings over time.

### Causal Inferences

Although the report examines whether enrollees of various plans report differential satisfaction with various aspects of their health care experiences, these differences may not be attributed totally to the plan. These analyses identify whether enrollees in various types of health plans give different ratings of satisfaction with their plans. The survey by itself does not reveal why the differences exist.